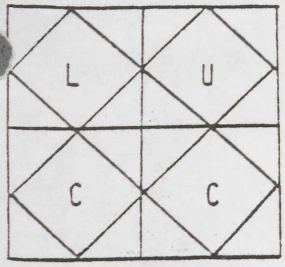
12-15-1978

User Services External Report

Lehigh University



USER SERVICES EXTERNAL REPORT

LEHIGH UNIVERSITY COMPUTING CENTER
CDC 6400 (CM 64KW, ECS 1/8 MW, SCOPE 3.4.4) VARIAN 620/f
DECSYSTEM-2040 (256KW MEMORY, TOPS-20 V3)
PDP 11/34 (96KW MEMORY, RSTS/E V06C)
Vol. VI, No. 2
December 15, 1978

1.0 NEW COMPUTING CENTER MANAGEMENT TEAM

Two administrative changes -- an appointment and a promotion -- in the Computing Center's management have been announced by Dr. Joseph F. Libsch, Vice President for Research.

Dr. Ben L. Wechsler, Associate Professor of Industrial Engineering at the University, has been named Director of the Computing Center, effective January 1, succeeding Dr. John E. Walker who left the University last June.

Mr. William R. Harris, formerly Assistant Director and Programming Manager of the Computing Center, and Interim Director, moved up to Associate Director, effective November 1.

Dr. Wechsler is a graduate of Carnegie Institute of Technology (now Carnegie-Mellon University) with a B.S. degree in Mechanical Engineering. He served as an officer in the U.S. Army from 1942 to 1972 and earned a M.A. in International Affairs from George Washington University.

He was Professor of Military Science and Commander of Lehigh's Army ROTC unit from 1969 until retiring from the Army in 1972 with the rank of colonel. Thereafter he earned a Ph.D. in Industrial Engineering at Lehigh and has been a member of the Industrial Engineering faculty since that time.

Mr. Harris received the A.B. and M.B.A. from Temple University. He was affiliated with the IBM Corporation in Philadelphia. Other work experience includes a three year tour of duty with the U.S. Navy and serving as the Manager of Systems and Programming at Temple University.

2.0 UPDATE ON HARDWARE AND SITE IMPROVEMENTS

In the September 15 issue of USER, a number of hardware improvements and site enhancements were announced. An update on these items follows.

*CDC 6400 - Limited user access to the new nine-track magnetic tape drive has been delayed until the Computing Center receives a new combined disk system and tape system controller from Control Data. The delivery date of this equipment is still uncertain. Three additional new tape drives -- one seven-track and two nine-track -- are scheduled for delivery in December 1978.

The installation of the additional 100000 (octal) words of central memory will begin on Friday, December 22. The CDC 6400 will be unavailable to users during the period of installation. If the CDC customer engineers can complete the task in time (over 2000 wires must be connected), the system will again be available on Wednesday, December 27. It is possible that after the installation the stability of the system may not be up to current standards. If this installation schedule causes any major difficulties, please contact User Services.

*DECSYSTEM-20 - The second disk channel was installed with only a minimal amount of instability following its installation. Some of the planned dial-up telephone connections were not activated on schedule due to a delay in the arrival of the modems (data sets -- devices which transform the 1's and 0's of computer terminals and mainframes into tones for transmission over telephone lines).

*PDP 11/34 - The new disk drive has been installed, but will not be usable until the arrival of the systems software which makes it function. The eight new ports were installed, but not activated due to the lack of modems. The modification to speed up the access to memory will be made at a later date.

*Fritz Lab Annex Terminal Cluster - The terminal cluster in Room A3 of the Fritz Lab Annex has been opened. The current site hours are 8 AM to 6 PM, Monday through Friday. These hours will be expanded in the near future.

3.0 ALLENTOWN TELENET TELEPHONE NUMBER

The Telenet communications network has placed into service an Allentown telephone number to be used to access the network. The number is 435-8268. The Telenet network enables the user to transmit data anywhere in the country at costs which are usually much less than those which would result from a normal, directly dialed telephone call.

4.0 COMPUTING CENTER COMMITTEES

There are two faculty/staff committees which interact with the Computing Center. Members of the Lehigh community are urged to communicate with the committee members regarding computing policy and operating procedures.

The committee concerned with University computing policy is the Computing Center Advisory Committee. This committee is supported in its work by a standing subcommittee -- the Users' Subcommittee. The subcommittee works closely with the Computing Center to review, recommend and approve procedural changes. The current membership of the two committees follows:

Advisory Committee	Users' Subcommittee
J. R. McNamara, Chairman	G. Rayna, Chairman
C. W. Clump	G. J. Borse
G. C. Driscoll	G. A. Fullman
W. B. Fowler	A. J. Kasarda
B. D. Fritchman	A. E. King
W. R. Harris	J. G. Lutz
S. H. Johnson	D. R. Mertz
J. F. Libsch	B. A. Muschlitz
E. P. Morgan	M. R. Notis
G. Rayna	R. A. Pfenning
B. G. Richards	J. H. Wachter
L. J. Tuscher	M. K. Wilson
J. H. Wachter	
E. W. Zimmers, Jr.	

5.0 COMPUTE AT STANFORD, CORNELL, DARTMOUTH ... ?

Lehigh University has been a member of EDUCOM for many years. Among other things, this membership entitles the university community to discounts on hardware purchased from participating vendors. For the past five years, Lehigh has belonged to EDUCOM's Planning Council. One benefit of this affiliation is the ability to access the computing facilities of member institutions such as Stanford, Cornell, Dartmouth, MIT, Notre Dame, Rice and the MERIT network in Michigan.

Under a grant Lehigh received from EDUCOM, limited experimental access to these off-campus computing resources will be possible through June 1979. This access is accomplished from a computer terminal on the Lehigh campus utilizing the EDUNET network.

To encourage the sampling of specialized computer resources available through EDUNET, a series of workshops will be presented in the following disciplines: statistics, biology, psychology, business and economics, and mathematics. The workshops will be held on January 23 and January 24. A detailed agenda has been mailed to all Lehigh faculty members. Further information can be obtained by contacting Carol Rauch (ext. 2011) or Gary Lutz (ext. 2021).

6.0 FROM THE LIBRARIAN

6.1 New Programs - CDC 6400

6.1.1 *COPYRM - Copy Via Record Manager (J90023) -

COPYRM is a program which sequentially copies one file to another using the CDC Record Manager software to do any reformatting. It is an efficient and easy-to-use alternative to the program FORM, but does not have the latter's character conversion and other special capabilities.

6.1.2 *MAC80 - Intel 8080 Assembler (L10003) -

The MAC80 program assembles the source language for programs to be executed on an Intel 8080 microprocessor. The assembled code can be punched on paper tape for use on the 8080.

6.1.3 *PLM80 - Intel 8080 PL/M Compiler (L20011) -

The PLM80 program compiles programs written in PL/M to be executed on an Intel 8080 microprocessor. The compiled code can be punched on paper tape for use on the 8080.

6.1.4 *INFOC - Infocision Network Models (H40013) -

INFOC utilizes the Infocision network modeling technique specifically to model investment decision systems.

6.2 New Programs - DEC 20

6.2.1 *PASCAL - PASCAL Compiler (L20012) -

A new PASCAL compiler for the DEC 20 has been made available. It was developed at Rutgers University and is comparable to PASCAL-6000.

6.2.2 *HAZDUD - CRT Display Driver (J90056) -

The DEC 20 version of HAZDUD, a collection of FORTRAN subroutines designed to allow the user to control the terminal functions of a Hazeltine or Perkin-Elmer video display terminal, is now available. It is fundamentally upward compatible with the CDC 6400 version.

6.2.3 *FIGN - Printer/Terminal Plotter (J50095) -

The DEC 20 version of FIGN, a FORTRAN subroutine which produces a line printer or printing terminal plot, is now available.

6.3 New Programs - PDP 11/34

6.3.1 *CAI - English (Z10003)/Botany (Z10005) -

Fifty CAI review exercises have been added to the library on the PDP 11/34. Forty-six English lessons may be accessed with the command CAI ENGLIS, and four Botany lessons may be accessed with the command CAI PLANT. Users are reminded that the library also includes thirty-two exercises for Samuelson's Ecomonics text (CAI ECO) and seventeen lessons teaching the BASIC programming language (CAI TUTOR).

7.0 USAGE STATISTICS

7.1 CDC 6400

	8/78	9/78	10/78
Batch Jobs Processed	17,448	49,733	60,391
Central Site Submissions	12,031	23,346	29,476
INTERCOM Terminal Sessions	6,459	7,231	7,442
INTERCOM Connect Hours	2,649	2,894	2,775
CP Hours - Batch	173.6	174.2	193.6
- INTERCOM	26.6	22.6	22.3

7.2 DECSYSTEM-20

	8/78	9/78	10/78
Terminal Sessions	1,722	3,669	7,690
Connect Hours	1,334	1,476	3,671
CP Hours - All Jobs	72.0	71.3	137.2

7.3 PDP 11/34

	8/78	9/78	10/78
Connect Hours	1,249	1,454	1,447
CP Hours	39.4	41.4	41.1

8.0 OPERATIONAL STATISTICS

8.1 CDC 6400

	8/78	9/78	10/78
Time System Available During Scheduled Hours (Percentage)			
Batch	99.5	100.0	99.8
INTERCOM	99.4	99.9	99.8
Mean-Time Between Interruptions (Hours)			
Batch	350.4	349.8	427.2
INTERCOM	118.0	183.0	85.4

8.2 DECSYSTEM-20

	8/78	9/78	10/78
Time System Available During Scheduled Hours (Percentage)	95.1	99.9	93.3
Mean-Time Between Interruptions (Hours)	69.9	119.1	41.2

8.3 PDP 11/34

	8/78	9/78	10/78
Time System Available During Scheduled Hours (Percentage)	100.0	99.7	94.3
Mean-Time Between Interruptions (Hours)	351.5	175.1	80.8